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Design of a Pedagogical Gamification Tool for Improving Interaction in Online EFL Education, in the province of Imbabura

Diseño de una Herramienta Pedagógica de Gamificación para Mejorar la Interacción en la Enseñanza de Inglés en Línea como Lengua Extranjera en la provincia de Imbabura

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RESUMEN

La presente investigación tuvo como propósito analizar la influencia de la gamificación en el aprendizaje del inglés como lengua extranjera en entornos virtuales, con el fin de elaborar una guía metodológica dirigida a docentes de la provincia de Imbabura. La investigación se fundamentó en un enfoque cualitativo de tipo bibliográfico-documental, a través de la revisión sistemática de literatura nacional e internacional, el análisis de marcos normativos y la identificación de tendencias en plataformas de capacitación docente como Mecapacito. Los resultados evidencian que la gamificación contribuye significativamente a la motivación, autonomía y participación de los estudiantes en entornos virtuales, además de favorecer la interacción y reducir la ansiedad lingüística. La guía elaborada integra fundamentos pedagógicos, elementos gamificados (como insignias, progresión, rankings y retroalimentación inmediata), y herramientas digitales accesibles para la práctica docente. Asimismo, se relaciona con metodologías activas presentes en las mallas curriculares de formación docente en Ecuador, como el Aprendizaje Basado en Problemas, Aula Invertida, CLT, TBLT y Aprendizaje Basado en

Proyectos. En conclusión, la guía constituye un aporte práctico al campo educativo, al ofrecer a los docentes recursos claros y contextualizados que fortalecen la enseñanza del inglés online mediante estrategias lúdicas e innovadoras. Su pertinencia se sustenta en el marco pedagógico, legal y curricular ecuatoriano, lo cual garantiza su aplicabilidad y relevancia en la formación docente actual.

Palabras clave: gamificación, enseñanza del inglés, aprendizaje en línea, metodologías activas, Imbabura

ABSTRACT

The purpose of this research was to analyze the influence of gamification on learning English as a foreign language in virtual environments, with the aim of developing a methodological guide for teachers in the province of Imbabura. The research was based on a qualitative, bibliographic-documentary approach, through a systematic review of national and international literature, analysis of regulatory frameworks, and identification of trends on teacher training platforms such as Mecapacito. The results show that gamification significantly contributes to students' motivation, autonomy, and participation in virtual environments, as well as fostering interaction and reducing language anxiety. The guide integrates pedagogical foundations, gamified elements (such as badges, progression, rankings, and immediate feedback), and accessible digital tools for teaching practice. It also aligns with active methodologies included in Ecuador's teacher training curricula, such as Problem-Based Learning, Flipped Classroom, CLT, TBLT, and Project-Based Learning. In conclusion, the guide constitutes a practical contribution to the educational field by providing teachers with clear, contextualized resources that strengthen online English instruction thru playful and innovative strategies. Its relevance is grounded in the Ecuadorian pedagogical, legal, and curricular framework, which ensures its applicability and relevance in current teacher training.

Keywords: gamification, English teaching, online learning, active methodologies, Imbabura

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INTRODUCTION

Online education has become a central strategy for ensuring educational continuity and expanding access to knowledge in the 21st century. In the field of English as a Foreign Language (EFL), it offers opportunities for learners to access authentic linguistic materials regardless of geographical barriers. However, several studies reveal persistent limitations related to motivation, active participation, and interaction (Cheng et al., 2025; Tsai et al., 2024). Virtual classrooms are often characterized by passive learning and reduced collaboration, which negatively affect the acquisition of communicative competences.

In the Latin American and Ecuadorian contexts, the integration of online education has grown rapidly but remains largely guided by traditional, teacher-centered approaches, where content transmission prevails over interactive methodologies. Research indicates that students in virtual EFL environments demonstrate lower levels of interaction with peers and teachers, limiting the development of essential language skills (Cabrera-Solano, 2022; Panmei & Waluyo, 2022). This issue is particularly evident in Imbabura, where teachers face challenges in adapting methodologies to digital platforms and lack methodological tools to sustain student engagement.

Gamification has emerged as a promising pedagogical approach to address these challenges. By integrating game design elements such as points, badges, rankings, progress levels, and collaborative challenges into educational contexts, gamification promotes motivation, autonomy, and meaningful interaction (Deterding et al., 2011; Su & Cheng, 2023). Its application in EFL instruction has shown positive results worldwide, increasing participation and reducing language anxiety (Campillo-Ferrer et al., 2025; Romero-Rodríguez & Lara-Bocanegra, 2025). Despite these benefits, its use in Ecuador remains fragmented, with little systematization to guide teachers in its effective implementation.

From a theoretical perspective, gamification is supported by key learning theories such as Self-Determination Theory (Deci & Ryan, 1985), Social Learning Theory (Bandura, 1977), and Constructivism (Vygotsky, 1978; Piaget, 1970). These frameworks highlight how autonomy, collaboration, and active problem-solving are essential for learning, all of which can be strengthened through gamified strategies.

In addition, Ecuador's educational and legal framework emphasizes the need for innovative, inclusive, and technology-driven teaching practices. The Constitution (Asamblea Nacional, 2008), the Organic Law of Intercultural Education (Ministerio de Educación, 2011), and the National Development Plan 2021–2025 (Presidencia de la República, 2021) all prioritize pedagogical innovation and digital transformation as mechanisms to ensure educational quality. In this sense, the design of gamification-based pedagogical tools responds directly to national priorities.

The aim of this research is therefore to design a pedagogical gamification tool to enhance student interaction in online EFL education in Imbabura. To achieve this, the study:

- Analyzes recent scientific literature on gamification and its impact on student interaction in virtual EFL contexts.
- Identifies effective gamification strategies and elements reported in national and international research.
- Systematizes theoretical and normative evidence to support the proposal.
- Develops a gamification-based guide with methodological orientations for Ecuadorian EFL teachers.

In summary, this paper addresses a pedagogical gap in the Ecuadorian context by offering a structured, evidence-based, and contextualized tool that strengthens online English teaching through innovative, interactive strategies.

MATERIALS AND METHODS

This study was conducted using a qualitative, bibliographic-documentary approach, as it did not seek to establish quantitative causal relationships but rather to analyze and interpret the scientific, pedagogical, and legal evidence on gamification in online English as a Foreign Language (EFL) instruction. This approach enabled a systematic review of the literature and regulations to design a contextualized pedagogical tool.

The research is framed within the Ecuadorian educational context, specifically in the province of Imbabura, characterized by its cultural and linguistic diversity, as well as by persistent challenges in technology access and teacher preparation for digital environments. Although no empirical population was directly involved, the indirect target group consists of English teachers from public and private institutions in the province, who require innovative methodological tools to foster interaction in virtual classrooms.

The study consisted of four main stages:

Review and analysis of the scientific literature:

A systematic search was conducted in academic databases such as Scopus, ERIC, Google Scholar, Redalyc, SciELO, and Dialnet, selecting publications from 2020 to 2025. Inclusion criteria considered:

- Research on gamification in virtual environments.
- Application in teaching English as a foreign language.
- Relevant methodological approaches (empirical, qualitative, or mixed).

The selected documents were organized into a document analysis matrix, classifying author, year, objectives, methodology, and key findings.

Identification of gamification techniques and elements

Selected studies were analyzed to identify the most effective gamification strategies for improving motivation, autonomy, and interaction. Core elements such as points, badges, leaderboards, progress levels, and immediate feedback were categorized according to their impact.

Theoretical and legal triangulation

The findings were contrasted with theoretical frameworks (Self-Determination Theory, Social Learning Theory, Community of Inquiry, Constructivism) and Ecuadorian legal and pedagogical frameworks (Constitution, LOEI, National Development Plan 2021–2025). This triangulation ensured the methodological and legal relevance of the proposal.

Design of the pedagogical tool

Based on the systematization process, a gamification methodological guide was designed for English teachers in Imbabura. This tool integrates pedagogical foundations, practical recommendations, accessible digital platforms, and examples linked to active learning methodologies such as Problem-Based Learning (PBL), the Flipped Classroom, the Communicative Language Approach (CLA), Task-Based Language Teaching (TBLT), and Project-Based Learning (PBL).

RESULTS

The guide is the practical outcome of the bibliographic analysis conducted in earlier chapters and directly addresses the overall aim of the study. It combines theoretical ideas, real-world examples, and legal-educational guidelines into a method that teachers can use in their virtual classrooms.

There are two parts to the chapter. First, the results are shown through the way the gamification guide is put together and described, with a focus on its parts, teaching methods, and how it can be used in Ecuador. Second, a discussion is created that compares these results to the theoretical framework and background research, showing how the suggested tool solves the problems found in online EFL teaching. This chapter not only talks about the product that was made, but it also critically looks at how relevant, coherent, and potentially useful it is in the local educational setting.

Presentation of the Gamification Guide

Introduction

The goal of this guide is to give English as a Foreign Language (EFL) teachers in Imbabura province a useful and theoretically sound resource that uses gamification in online learning. It addresses the pedagogical imperative to enhance motivation, interaction, and active engagement in virtual classrooms, which continue to be significant challenges in Ecuadorian education (Auquilla et al., 2024). The guide aims to make traditional online classes more fun and

interactive by incorporating game-like elements such as progress bars, rewards, and group challenges.

The rationale for this tool lies in the persistent methodological deficiencies observed in online English teaching in Ecuador, characterized by the predominance of transmission-based, teacher-centered approaches. Research conducted in Latin America indicates that students enrolled in online English as Foreign Language (EFL) courses frequently exhibit low levels of participation and reduced opportunities for substantive communication (Auquilla et al., 2024). In Imbabura, the predominant methodologies for in-person English instruction are the grammar-translation method and, to a lesser extent, the communicative approach, both commonly used in conventional classroom settings. Recent evidence corroborates that gamification serves as a pedagogical strategy with a considerable influence on students' motivation in the field of English as a Foreign Language (EFL). A quantitative study at the Technical University of Ambato indicates that students highly value the elements of cooperation and competition (25%), the freedom to make mistakes (22%), and the perception of continuous progress (17%), asserting that this methodology enhances their engagement with learning (Infante-Paredes et al., 2024). These methodologies establish a basis for linguistic development; however, they inadequately fulfill the necessity for continuous motivation and interactive practice within the digital context.

This guide is mainly for English teachers in public and private schools in Imbabura who need to change how they teach to fit the needs of virtual learning. Gamification is not suggested as a substitute for established methodologies but as an adjunct strategy that augments them. Gamification is in line with modern teaching methods that stress active, student-centered learning (Su & Cheng, 2023) because it encourages student independence, teamwork, and lessens language anxiety.

This guide aims to equip teachers with practical, flexible strategies that address the specific educational context, facilitating the creation of dynamic and inclusive online learning environments. In this way, it helps to achieve the larger goal of making English teaching better in Imbabura and supporting Ecuador's promise to be innovative and fair in education (Presidencia de la República del Ecuador, 2021).

Pedagogical foundations of the guide

This guide is based on different educational theories that support using gamification as a way to teach English online. These foundations are derived from classical educational theories and contemporary research that has evidenced the beneficial effects of game-based elements on foreign language instruction.

One of the most important things that affects how well you learn a foreign language is your motivation. Self-Determination Theory posits that students exhibit greater engagement when their needs for autonomy, competence, and relatedness are met. Aly (2020), in a study conducted in Egypt, confirms that gamified environments significantly improve students'

motivation by incorporating symbolic rewards, immediate feedback, and challenges that reinforce their sense of progress and autonomy. Recent studies in virtual English-as-a-foreign-language environments indicate that students exhibit greater intrinsic motivation when they participate in gamified activities that promote self-regulation and autonomy in their learning (Su & Cheng, 2023).

Meaningful interaction with others enhances language learning. Vygotsky's sociocultural theory (1978) posits that knowledge develops through interactions with others within the zone of proximal development. Bandura's social learning theory (1977) also highlights the importance of learning through observation and imitation of others. Gamification encourages people to work together in virtual worlds by using elements such as leagues, teams, and collaborative challenges. This makes people more likely to participate and strengthens the sense of community. Research conducted in Ecuador indicates that collaboration and equitable competition in gamified settings enhance students' propensity to engage in English (Infante-Paredes et al., 2024).

When people learn English online, they often have emotional problems that make it hard for them to do so, such as low self-esteem and anxiety about speaking. Gamification helps students feel more confident by giving them safe, fun, and challenging activities. This makes them less afraid of making mistakes. Campillo-Ferrer et al. (2025) assert that students in gamified environments exhibit enhanced confidence in speaking English, whereas Meng et al. (2023), in a study conducted in rural, resource-constrained contexts, illustrate that technological gamification alleviates language anxiety and augments student engagement in English language acquisition.

For online education to work, students need to see the virtual classroom as a safe and encouraging place to learn. Gamification helps create this kind of space by turning tests into positive feedback and mistakes into chances to learn. This principle is in line with Gee's (2003) ideas, which say that fun environments encourage people to try new things without worrying about failing. In Imbabura, where students often feel shy about speaking English, making safe digital spaces is important for getting them to take part.

These pedagogical principles illustrate that gamification not only embodies a global educational trend but also caters to local requirements: enhancing motivation, cultivating autonomy, encouraging meaningful interaction, and addressing the emotional factors that impact English language acquisition. The guide uses strong theoretical ideas and recent research shows that using gamified strategies in virtual EFL instruction in Imbabura is still useful.

Gamification Elements

Gamification in teaching English as a Foreign Language (EFL) transcends the mere incorporation of game mechanics; it involves the creation of engaging, structured, and purposeful learning experiences that amalgamate playful elements with educational objectives. When used correctly, these parts make a space that encourages intrinsic and extrinsic motivation, task persistence, and student interaction (Werbach & Hunter, 2012; Anuradhani et al., 2023).

Here are the main parts of gamification and how they are used in virtual learning environments:

One of the best ways to stay motivated is to see your progress. The progress bar shows students exactly how far they've come in their work and how much more they need to do to reach their goal. Hamari et al. (2019) say that this feature makes people feel more accomplished and encourages them to keep going, especially in virtual environments where quick feedback is important.

Students can identify themselves in the gamified world by using characters and avatars. Students project parts of themselves by customizing an avatar, which makes the activity more immersive and engaging. Making avatars can help people feel less anxious and more likely to participate in language learning situations (Domínguez et al., 2013).

Visual design is very important for gamification. Bright colors and clear, modern typeface draw attention, make things look better, and make people feel more connected to the task. Khuzzan et al. (2021) assert that visual and graphic components utilized in gamified settings positively influence motivation and engagement by rendering activities more appealing and accessible to students.

Gamification needs positive reinforcement. Digital badges, motivational phrases, and symbolic rewards can help keep people interested in long-term activities by recognizing their achievements. Infante-Paredes et al. (2024) showed that Ecuadorian students really liked getting immediate feedback and earning badges. This made them more motivated and willing to participate in English classes.

The variety of activities, like interactive quizzes, group challenges, themed missions, and trivia, keeps things interesting and stops them from getting boring. Lee and Hammer (2011) say that doing a lot of different things helps students learn in different ways and gives them more chances to succeed, which makes them more confident.

Gamification encourages consistency by using participation streak systems that give rewards for attending or finishing tasks on a regular basis. Duolingo and other platforms have shown that this method works for keeping up with EFL study habits (Loewen et al., 2019).

Leaderboards add a healthy dose of competition to the mix for students. It can encourage extrinsic motivation, but it's best to balance the competitive side with the collaborative side to keep lower-performing students from losing interest (Hanus & Fox, 2015). In Imbabura, where working together as a community is important, team-based leagues are a better idea than individual competitions.

One new thing about gamification is that it recognizes that even feeling unmotivated can be a reason to improve. When students get clear and easy-to-understand feedback on their weaknesses, they can turn that information into a personal challenge to overcome. Meng et al.

(2023) assert that in rural English learning environments, students perceive failures in gamified activities as chances for enhancement, thereby alleviating anxiety and fostering perseverance.

In conclusion, the gamification elements outlined—progress bars, avatars, appealing visual design, rewards, diverse activities, streaks, rankings, and the reframing of demotivation—represent essential components for invigorating online English language learning. Teachers can use it strategically to make virtual spaces where motivation, interaction, and collaboration are all part of the curriculum. This makes it easier for EFL students to learn how to communicate.

Recommended gamification tools and platforms

Choosing the right digital tools is very important for successfully using gamification to teach English as a foreign language (EFL). In Imbabura, where technology resources differ between urban and rural institutions, it is prudent to select accessible and adaptable platforms that foster both motivation and interaction within the virtual classroom. Some of the most important ones are those that focus on feedback and formative assessment. For example, Kahoot! lets you make interactive quizzes in real time and encourages playful participation. It is highly valued for its positive effects on motivation and concentration (Licorish et al., 2018). Wayground works asynchronously and gives detailed performance statistics, which makes it easier to keep track of both individuals and groups. Socrative, on the other hand, is a quick diagnostic tool that helps teachers find specific grammar or vocabulary weaknesses.

When it comes to working together and interacting, platforms like Padlet stand out. They let students make digital walls where they can share written or audiovisual work, which helps them communicate in English as a group. Genially is another example; it has tools for making presentations, infographics, and interactive games, and it has been used in Ecuador for EFL gamification to get people involved (Cabrera-Solano, 2022). Finally, FigJam is a digital whiteboard that works well for brainstorming and writing activities in English.

To promote autonomy and individual practice, the use of Duolingo is advised—an application that incorporates points, streaks, and rewards to ensure consistency in self-directed learning, and whose efficacy in cultivating study habits among language learners has been validated (Loewen et al., 2019). Wordwall makes it easy to make personalized games like crosswords, spinning wheels, and others that give you automatic feedback. Quizlet, on the other hand, is a great way to learn new words through digital flashcards and fun activities.

For motivation and recognizing achievements, tools like ClassDojo are helpful for giving students symbolic points for working together and participating, which encourages good behavior. Classcraft turns the classroom into a game with avatars, missions, and rewards. This encourages cooperation and the building of learning communities. Edmodo, on the other hand, uses a badge system to recognize academic and attitudinal achievements, which helps students feel like they are making progress.

Lastly, it's important to talk about integrated platforms that help with the execution of projects and missions. Google Classroom isn't a gamification tool on its own, but it does provide a central place where you can connect Kahoot!, Wayground, and other apps to make it easier to plan gamified activities. Minecraft Education Edition has also become a cutting-edge tool for problem-based learning projects, allowing players to create missions in immersive settings that encourage English problem-solving (Nebel et al., 2016). Edpuzzle, on the other hand, turns videos into interactive lessons with questions built in. This is especially useful for the flipped classroom in EFL settings.

In short, each of these platforms has a different educational purpose. Kahoot!, Wayground, and Socrative are great for quick feedback and assessment; Padlet, Genially, and FigJam make it easier for people to work together; Duolingo, Wordwall, and Quizlet help people learn on their own; ClassDojo, Classcraft, and Edmodo help people stay motivated and recognize their achievements; and Google Classroom, Minecraft, and Edpuzzle help people work on more difficult projects and missions. This way, teachers in Imbabura can choose the tool that works best for their lesson goals and their students' technological needs. This makes virtual environments for teaching English more dynamic, motivating, and effective.

Methodological starting points

The selection of active methodologies such as Problem-Based Learning (PBL), Flipped Classroom, Communicative Language Teaching (CLT), Online Collaborative Learning, Task-Based Language Teaching (TBLT), ERCA, and Project-Based Learning (PjBL) is informed not only by their established pedagogical efficacy but also by their incorporation into Ecuadorian teacher education curricula.

A review of curricula from national universities, including the Universidad Nacional de Educación (UNAE)—which provides an officially licensed degree in Basic Education in both face-to-face and virtual formats—indicates that its courses are organized around competence-based training, engagement with educational technologies, and participatory methodologies (Revista UISRAEL, 2023; Multi-Lingual Scientific Journals, 2023; RUS, Universidad de Cienfuegos, 2022). These curricular components indicate an institutional emphasis on cultivating communicative, autonomous, and collaborative competencies from the initial phases of teacher education.

A recent study examining K-12 teacher education programs at 25 Ecuadorian universities underscores the significance of pre-professional practice as a conduit between theoretical frameworks and pedagogical implementation (ResearchGate, 2023). These practices are frequently conducted within dynamic methodological frameworks, enabling prospective educators to engage with authentic classroom environments where strategies such as PBL, CLT, TBLT, or project-based methodologies can be implemented and critically evaluated.

Literature reviews of active methodologies in Ecuador indicate a growing adoption of problem-based learning, project-based learning, and flipped classrooms, acknowledging that the shift from traditional methods has spanned several years and requires the simultaneous application of various methodologies (MLS Journals, 2024; ResearchGate, 2023; Revista UISRAEL, 2023).

The methodologies selected for the guide are not arbitrary but are based on two pillars: their pedagogical effectiveness and their institutional legitimacy within Ecuador's teacher training system. They are included in the curricula of universities such as UNAE and UCE, validated by research on pre-professional internships at 25 national institutions, and reinforced thru continuing education programs like Mecapacito, which emphasizes active and innovative teaching approaches. By situating the guide within this framework, its design ensures both academic rigor and practical feasibility, providing educators in Imbabura with tools that are consistent with their professional training and aligned with national educational priorities.

Problem-Based Learning (PBL)

Table 1

Gamification tools in Problem-Based Learning (PBL)

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
Genially 	https://genially.com/	Creation of interactive missions and visual challenges	Design a case-problem in English with interactive clues for groups to solve.
Padlet  padlet	https://padlet.com/	Collaborative work and sharing solutions	Students post their problem-solving proposals on a digital wall.
Wordwall  Wordwall	https://wordwall.net/	Motivation and cooperation in problem-solving	Teams complete interactive challenges (matching, quizzes, word hunts) that unlock stages of the problem collaboratively

Kahoot!



Wayground



<https://kahoot.com/>
<https://wayground.com/join>

Feedback on
problem
comprehension

Quick
quizzes to check
key vocabulary
before tackling the
problem.

Flipped Classroom

Table 2

Gamification tools in the Flipped Classroom

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
Edpuzzle  edpuzzle	https://edpuzzle.com/	Transform videos into interactive lessons	Insert comprehension questions into a video in English before the live class.
Quizlet 	https://quizlet.com/	Autonomous practice of vocabulary and structures	Assign digital flashcards for students to prepare the topic at home.
Duolingo 	https://www.duolingo.com/	Reinforce autonomy through study streaks	Assign weekly practice tasks to prepare for class.
Kahoot! 	https://kahoot.com/	Quick diagnostic evaluation at the start of class	Short quiz to measure prior understanding of the flipped material.

Communicative Language Teaching (CLT)

Table 3

Gamification tools in Communicative Language Teaching (CLT)

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
ClassDojo 	https://www.classdojo.com/	Reinforce oral participation with points and badges	Award points to students who actively speak in English during discussions.
FigJam 	https://www.figma.com/es-la/figjam/	Stimulate collaborative writing interaction	Co-create dialogues or stories in English in a shared virtual space.
Genially 	https://genially.com/	Interactive role-play with digital scenarios	Create simulations where students assume communicative roles.
Padlet  padlet	https://padlet.com/	Promote exchange of ideas and debates	Students publish and respond to arguments in English on a shared wall.

Online Collaborative Learning

Table 4

Gamification tools in Online Collaborative Learning

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
Padlet  padlet	https://padlet.com/	Support collective knowledge building	Groups upload essays, posters, or other

			productions in English.
FigJam 	https://www.figma.com/es-la/figjam/	Stimulate co-writing and collaborative problem-solving	Teams write dialogues or stories in English in real time.
Genially 	https://genially.com/	Promote co-creation of interactive gamified content	Students design quizzes or games in English for peers.
Wordwall 	https://wordwall.net/	Strengthening teamwork and community sense	Teams gain collective points by completing collaborative activities.

Task-Based Language Teaching (TBLT)

Table 5

Gamification tools in Task-Based Language Teaching (TBLT)

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
Kahoot! 	https://kahoot.com/	Evaluate vocabulary and grammar comprehension before tasks	Mini quizzes to prepare learners before communicative tasks.
Wayground 	https://wayground.com/join		
Wordwall 	https://wordwall.net/	Provide individual practice before/after tasks	Interactive games with vocabulary or expressions relevant to the task.
Edpuzzle	https://edpuzzle.com/	Provide meaningful input with	A video in English with embedded questions

		interactive videos	that prepares the task.
ClassDojo 	https://www.classdojo.com/	Reward progress during tasks	Points and badges for completing each stage of the communicative task.

ERCA (Experience, Reflection, Construction, Application)

Table 6

Gamification tools in ERCA (Experience, Reflection, Construction, Application)

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
Edpuzzle 	https://edpuzzle.com/	Present initial experiences through interactive videos	A video in English with comprehension checks to trigger reflection.
Padlet 	https://padlet.com/	Facilitate shared reflection	Students write their reflections in English on a collaborative wall.
FigJam 	https://www.figma.com/es-la/figjam/	Support collaborative and visual knowledge construction	Create concept maps in English as a team.
Genially 	https://genially.com/	Apply knowledge through interactive challenges	Interactive missions requiring students to apply new concepts.

Project-Based Learning (PjBL)

Table 7

Gamification tools in Project-Based Learning (PjBL)

Gamification Tool	Tool Link	Specific pedagogical purpose	Suggestions / Examples
Minecraft Education Edition 	https://education.minecraft.net/	Create immersive projects with problem-solving in English	Design a “world” where students must solve communicative challenges.
Google Classroom 	https://classroom.google.com/	Integrate project phases and centralize resources	Upload instructions, rubrics, and evidence in one gamified space.
Padlet 	https://padlet.com/	Dissemination and feedback on final products	Students publish final projects (videos, essays, presentations) for peer feedback.
Genially 	https://genially.com/	Present projects in interactive formats	Create final projects in English using infographics, escape rooms, or games.
Wordwall 	https://wordwall.net/	Sustain motivation throughout long-term projects	Award points and rewards for completing project milestones as a team.

Recommendations for Teachers Based on Systematization Criteria

To successfully use gamification in online EFL teaching, you need both access to technology and a plan for how to use gamified elements to help students reach their learning goals. The following recommendations are made for teachers in Imbabura and other similar places based on the organization of the theoretical and empirical findings in this study.

How to Apply Gamification

Teachers should use gamification by making sure that game parts fit with certain communication goals. Simply adding points, badges, or rankings is not enough; these must be connected to language learning goals like learning new words, speaking with others, or writing together (Anuradhani et al., 2023). Leaderboards can be used to reward people who actively participate in English discussions, and progress bars can be used to keep track of how many drafts of writing are finished. Werbach and Hunter (2012) say that teachers should think of gamification as a planned process of design, where mechanics (rules and rewards) support dynamics (interaction and competition), which leads to engagement.

When to Apply Gamification

When used at the right times in the teaching-learning process, gamification works best. You can use it:

- To get students thinking about what they already know and to teach them new words, use quizzes or games (Kahoot!, Wayground) at the start of a unit.
- To keep people motivated and organize how they work together on group projects (Padlet, Classcraft).
- To reinforce learning at the conclusion of a unit through challenges or escape-room style missions (Genially).
- Studies indicate that sporadic gamification, implemented at significant intervals, mitigates cognitive overload and sustains prolonged engagement (Hamari et al., 2019; Hanus & Fox, 2015).

Why to Apply Gamification

The justification for employing gamification is based on cognitive and emotional advantages. Empirical research in EFL contexts demonstrates that gamification elevates student motivation, fosters interaction, and mitigates language anxiety, particularly in online and rural environments (Meng et al., 2023; Infante-Paredes et al., 2024). Gamification also helps students learn on their own by giving them ways to get feedback and recognition that let them keep track of their own progress (Su & Cheng, 2023). Gamification also boosts self-esteem and makes digital spaces safer for trying new things by turning mistakes into chances to learn and rewarding people for sticking with it (Khuzzan et al., 2021).

Practical Recommendations

- Begin small: Before adding more complicated systems, start with one or two gamified features, like badges or quizzes.
- Balance competition and collaboration: Be careful with leaderboards so that low-performing students don't lose motivation. In collectivist settings like Imbabura, make team-based missions a priority.

- Integrate with methodologies: Use gamification along with communicative and task-based methods, making sure that the mechanics of the game are connected to real-life use of English (Lee & Hammer, 2011).
- Make sure that everyone can use the tools you choose, even if they have limited internet access or are on a mobile device.
- Check the effect: Get feedback from students on a regular basis about whether gamified activities help them stay interested and improve their language skills.

DISCUSSION

The gamification guide developed as the primary outcome of this study illustrates the integration of theoretical principles, empirical evidence, and contextual requirements into a functional pedagogical instrument. The structure of the document, which includes an introduction, pedagogical foundations, gamification elements, recommended platforms, methodological starting points, and teacher recommendations, makes it easy to understand and use in the real world of online EFL teaching in Imbabura.

From an educational point of view, the guide directly addresses the problems that were found in the theoretical framework. Low motivation and limited interaction, issues commonly linked to online learning in Ecuador (Hernández & Paredes, 2022; Lozano et al., 2023), are mitigated by the incorporation of game mechanics such as progress bars, badges, streaks, and collaborative missions. These components align with the observations of Infante-Paredes et al. (2024), who identified that Ecuadorian EFL students regarded collaboration, the liberty to err, and a perception of advancement as principal motivators within gamified environments.

The guide is also in line with the psychological and social theories that support gamification. By using rewards and feedback systems, it backs up the ideas of Self-Determination Theory as Aly (2020) used them, showing how autonomy, competence, and relatedness can be met in a game-like setting. The focus on collaboration and interaction aligns with Vygotsky's (1978) sociocultural theory and Bandura's (1977) social learning theory, as students acquire knowledge not only through solitary tasks but also by observing and engaging with their peers. This connection is particularly significant in rural or resource-poor contexts, where Meng et al. (2023) evidenced that gamification alleviates language anxiety and enhances engagement, even amidst technological constraints.

The guide is new in that it connects gamification to active learning methods like problem-based learning, task-based teaching, and project-based learning. This integration offers a definitive solution to the deficiency of contextualized methodological tools identified in Ecuadorian studies (Valencia-Guerrero & Andrade, 2023; Cabrera-Solano, 2022). For teachers who are used to traditional methods like grammar-translation, the guide gives them useful tips on how to switch to more interactive, communicative, and student-centered methods.

The guide also fits with Ecuador's laws and policies, especially the Constitution's (Asamblea Nacional, 2008) and the Organic Law of Intercultural Education's (Ministerio de Educación, 2011) ideas of fairness, participation, and innovation. It also supports the goals of the National Development Plan 2021–2025, which lists digital transformation and pedagogical innovation as top priorities (Presidencia de la República del Ecuador, 2021). The guide helps these national goals by suggesting gamification as a possible and flexible strategy. It also gives teachers the tools they need to make their online classrooms more welcoming and interesting.

Finally, it is important to point out that the guide is not only based on international research on gamification, but it also puts it in the context of the province of Imbabura. Studies conducted in China, Turkey, and Spain (Cheng et al., 2025; Sahin & Erdem, 2025; Campillo-Ferrer et al., 2025) validate that gamification improves motivation, collaboration, and self-confidence. Furthermore, evidence from Ecuador (Infante-Paredes et al., 2024; Cabrera-Solano, 2022; Valencia-Guerrero & Andrade, 2023) illustrates that these advantages can be achieved within local contexts. The guide thus helps to close the gap between what is happening in other countries and what Ecuadorian schools need.

To sum up, the discussion of the results shows that the gamification guide is not just a one-time idea; it is a structured teaching tool backed by theory, evidence, and the law. It meets the goals of this research by giving teachers specific ways to improve interaction in online EFL classes. It also helps Ecuadorian education reach its bigger goals of innovation and quality.

CONCLUSIONS

The current study aimed to develop a pedagogical gamification guide to enhance interaction in online EFL classes in Imbabura. The conclusions are consistent with the study's objectives and underscore its most significant contributions:

Contribution to the study context (Imbabura and Ecuador): The guide addresses a recognized deficiency of methodological resources that assist educators in integrating gamification into virtual English instruction. It gives teachers in Imbabura useful strategies that are tailored to their technological and cultural environment by putting international evidence into the context of Ecuador.

Contribution to the body of knowledge

The study organized recent theoretical and empirical findings on gamification, connecting them with active learning methodologies (PBL, CLT, TBLT, ERCA, PjBL). This integration shows that gamification is not just a passing fad; it is a pedagogically sound method that boosts motivation, independence, and teamwork in online EFL settings.

Response to the general objective: The gamification guide is the main product of the study, and it meets the goal of giving EFL teachers a useful and concrete tool.

Answer to the specific goals

- The bibliographic analysis helped us find the best gamification strategies and parts for teaching English online.
- We put these findings into a guide that has theoretical foundations, methodological applications, suggested tools, and organized suggestions for teachers.
- The guide also follows Ecuador's laws and educational policies, which are based on the ideas of fairness, innovation, and digital transformation set out in national laws.

Theoretical and practical significance

This study helps to close the gap between theory and practice in gamification research. It not only looks at the evidence and talks about it, but it also turns it into a useful tool for teachers, which helps both academic discussion and new ideas in the classroom.

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